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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,192	08/10/2001	Shell Sterling Simpson	10007680-1	6999

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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NANO, SARGON N

ART UNIT	PAPER NUMBER
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2157

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/03/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/928,192

Applicant(s)

SIMPSON, SHELL STERLING

Examiner

Sargon N. Nano

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9/29/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7 - 37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7 - 37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **Response to Amendment**

1. This action is responsive to Amendment filed on Sept. 29, 2006. Claims 7 – 37 are pending.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if *the* international application designated the United States and was published under Article 21(2) of such treaty in the English language. .

2. Claims 7 – 29 and 31 – 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Yacoub Patent Application Publication No. 20030011805.

As to claim 7, Yacoub teaches one or more computer readable media having stored thereon a plurality of instructions that, when executed by one or more processors, causes the one or more processors to perform acts comprising:

identifying one or more devices in a network (see paragraph 0042, Yacoub discloses a number of network printers);

obtaining, for at least one of one or more network switches in the network, an indication of which port of the network switch a computing device is coupled to (see paragraph 0020, Yacoub discloses querying and computing the location or printers );

obtaining, for each of the one or more identified devices and for the at least one network switch, an indication of which port of the network switch the identified device is coupled to (see paragraphs 0020 and 0036, Yacoub discloses mapping the location of all available printers on a network); and

determining, for at least one of the one or more identified devices, how physically distant the identified device is to the computing device, wherein the determining is based at least in part on the indication of which port of the network switch the computing device is coupled to and the indication of which ports of the network switch the one or more identified devices are coupled to (see 0030, Yacoub discloses determining the nearest printer to a user).

As to claim 9, Yacoub teaches one or more computer readable media as recited in claim 7, wherein obtaining an indication of which port of the network switch a computing device is coupled to comprises obtaining the indication from the network switch (see paragraph 0030).

As to claim 8, one or more computer readable media as recited in claim 7, wherein at least one of the identified one or more devices comprises a printer (see

0040).

As to claim 10, Yacoub teaches one or more computer readable media as recited in claim 7, wherein obtaining an indication of which port of the network switch the identified device is coupled to comprises obtaining the indication from the network switch (see paragraph 0036).

As to claim 11, Yacoub teaches one or more computer readable media as recited in claim 7, wherein the determining comprises generating, for at least one of the one or more identified devices, a ranking indicating a proximity of the identified device to the computing device relative to the other identified devices (see 0036).

As to claim 12, Yacoub teaches one or more computer readable media as recited in claim 11, wherein the plurality of instructions further cause to one or more processors to perform an additional act comprising: presenting, to a user, each of the generated rankings (see paragraph 0026).

As to claim 13, Yacoub teaches one or more computer readable media as recited in claim 7, wherein the computing device comprises both the computer readable media and the one or more processors (see figs. 3 and 4).

As to claim 14, Yacoub teaches one or more computer readable media as recited in claim 7, wherein the computing device comprises both the one or more processors and an I/O device to read the one or more computer readable media (see fig. 5).

As to claim 15, Yacoub teaches one or more computer readable media as recited

in claim 7, wherein determining how physically distant the identified device is to the computing device comprises:

checking, whether the identified device shares the same port on the switch as the computing device and with a smallest number of other devices also sharing the same port (see paragraphs 0025 – 0027 and 0036); and;

determining, if the identified device shares the same port on the switch as the computing device and with the smallest number of other devices also sharing the same port, that the identified device is one of the physically closest devices to the computing device (see paragraph 0025).

As to claim 16, Yacoub teaches one or more computer readable media as recited in claim 15, wherein determining how physically distant the identified device is to the computing device further comprises:

checking whether the identified device shares the same port on the switch as the computing device and with a smaller number of other devices also sharing the same port (see paragraphs 0025 – 0027 and 0036); and

determining, if the identified device shares the same port on the switch as the computing device and with the smaller number of other devices also sharing the same port, that the identified device is a second physically closest device to the computing device (see paragraph 0025).

As to claim 17, Yacoub teaches one or more computer readable media as recited in claim 16, wherein determining how physically distant the identified device is to the computing device further comprises:

checking whether the identified device shares the same port on the switch as the computing device without regard for a number of other devices also sharing the same port (see paragraphs 0025 – 0027 and 0036); and determining, if the identified device shares the same port on the switch as the computing device without regard for the number of other devices also sharing the same port, that the identified device is a third closest device to the computing device (see paragraphs 0024 and 0025).

As to claim 18, Yacoub teaches one or more computer readable media as recited in claim 17, wherein determining how physically distant the identified device is to the computing device further comprises: checking whether the identified device shares the switch with any number *of* other devices also sharing the switch (see paragraphs 0025 – 0027 and 0036); determining, if the identified device shares the switch with any number of other devices also sharing the switch, that the identified device is a fourth physically closest device to the computing device (see paragraphs 0024 and 0025); and determining, if the identified device does not share the switch with any number of other devices also sharing the switch, that the identified device is a fifth closest device to the computing device (see paragraphs 0024 and 0025);

As to claim 19, Yacoub teaches one or more computer readable media as recited in claim 7, wherein determining how physically distant the identified device is to the computing device comprises:

if the identified device shares the same port on the switch as the computing device and with a smallest number of other devices also sharing the same port, then determining the identified device is one of the physically closest devices to the computing device (see paragraphs 0024 and 0025);

otherwise, if the identified device shares the same port on the switch as the computing device and with a smaller number of other devices also sharing the same port, then determining the identified device is a second physically closest device to the computing device (see paragraphs 0024 and 0025);

otherwise, if the identified device shares the same port on the switch as the computing device and without regard for a number of other devices also sharing the same port, then determining the identified device is a third physically closest device to the computing device (see paragraphs 0024 and 0025); and

otherwise, if the identified device shares the switch with any number of other devices also sharing the switch, then determining the identified device is a fourth physically closest device to the computing device (see paragraphs 0024 and 0025).

As to claim 20, Yacoub teaches a method, implemented in a computing device that is part of a network, the method comprising:

detecting one or more network switches in the network (see paragraph 0024)



identifying one or more other devices of a particular type in the network  
(see paragraph 0040).

obtaining, for each of the identified one or more other devices and for at least one of the one or more network switches, an indication of which port of the network switch the device is coupled to, wherein the indication is obtained from at least one of the one or more network switches (see paragraph 0036); and

ranking, based at least in part on the obtained indications as well as which port of the network switch the computing device is coupled to, the one or more other devices in terms of their inferred physical proximity to the computing device (see paragraph 0026).

As to claim 21, a method as recited in claim 20, wherein the one or more other devices of a particular type comprises one or more printers (see fig. 5).

As to claim 22, Yacoub teaches a method as recited in claim 20, wherein identifying one or more other devices of a particular type in the network comprises identifying the one or more other devices in the network by accessing a list of device identifiers (see paragraph 0026).

As to claim 23, Yacoub teaches a method as recited in claim 20, wherein identifying one or more other devices of a particular type in the network comprises identifying the one or more other devices in the network by querying a plurality of devices on the network to determine, for each of the plurality of devices, whether the device is of the particular type (see paragraph 0026).

As to claim 24, Yacoub teaches a method as recited in claim 20, further comprising presenting, to a user, the ranking of at least one of the one or more other devices (see paragraph 0026).

As to claim 25, Yacoub teaches a method as recited in claim 20, wherein ranking a device of the one or more other devices comprises:

checking whether the device shares the same port on a network switch as the computing device and with a smallest number of additional devices also sharing the same port (see paragraphs 0025 – 0027 and 0036); and

determining, if the device shares the same port on the network switch as the computing device and with the smallest number of additional devices also sharing the same port, that the device is one of the physically closest devices to the computing device (see paragraphs 0025 – 0027 and 0036).

As to claim 26, Yacoub teaches a method as recited in claim 25, wherein ranking the device of the one or more other devices further comprises: checking whether the device shares the same port on the network switch as the computing device and with a smaller number of the additional devices also sharing the same port (see paragraphs 0025 – 0027 and 0036); determining, if the device shares the same port on the switch as the computing device and with the smaller number of the additional devices also sharing the same port, that the device is a second physically closest device to the computing device (see paragraphs 0025 – 0027 and 0036).

As to claim 27, Yacoub teaches a method as recited in claim 26, wherein ranking the device of the one or more other devices further comprises: checking whether the device shares the same port on the switch as the computing device without regard for a number of additional devices also sharing the same port (see paragraphs 0025 – 0027 and 0036); determining, if the device shares the same port on the switch as the computing device without regard for the number of additional devices also sharing the same port, that the device is a third physically closest device to the computing device (see paragraphs 0025 – 0027 and 0036).

As to claim 28, Yacoub teaches a method as recited in claim 27, wherein ranking the device of the one or more other devices further comprises: checking whether the device shares the switch with any number of additional devices also sharing the switch (see paragraphs 0025 – 0027 and 0036); determining, if the device shares the switch with any number of additional devices also sharing the switch, that the device is a fourth physically closest device to the computing device (see paragraphs 0025 – 0027 and 0036); and determining, if the device does not share the switch with any number of additional devices also sharing the switch, that the device is a fifth closest device to the computing device (see paragraphs 0025 – 0027 and 0036).

As to claim 29, Yacoub teaches a method, comprising: discovering network switches in a network- (see paragraph 0042) identifying devices connected to the network (see 0020); determining each switch and each port to which the devices are coupled (see paragraphs 0020 – 0036). determining each switch and each port to which a user computer is coupled; and ranking the devices based upon their inferred physical proximity to the user computer (see paragraphs 0020 – 0036).

As to claim 31, the method of claim 29, wherein identifying devices comprises identifying printers (see fig. 5).

As to claim 32, Yacoub teaches the method of claim 29, wherein identifying devices comprises consulting a list of network device identifiers (see paragraph 0026).

As to claim 33, Yacoub teaches the method of claim 29, wherein identifying devices comprises querying multiple addresses on the network (see paragraph 0026)

As to claim 34, Yacoub teaches the method of claim 29, wherein determining each switch and each port to which the devices and the user computer are coupled comprises obtaining switch and port information from at least one network switch (see paragraph 0036).

As to claim 35, Yacoub teaches the method of claim 34 wherein obtaining switch and port information comprises obtaining the switch and port information from a connection table of the at least one network switch (see paragraph 0036).

As to claim 36, Yacoub teaches the method of claim 29, further comprising automatically selecting the physically closest device (see paragraph 0024)

As to claim 37, Yacoub teaches the method of claim 29, further comprising presenting the rankings to the user (see paragraph 0026)

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yacoub U.S. Patent Publication No.2003/0011805 and further in view of official

As to claim 30 is rejected over Yacoub and further in view of official notice.

Yacoub teaches the invention as mentioned above. Yacoub does not explicitly teach SNMP as recited in claim 30, however Yacoub suggests using a number of other protocols (see paragraph 0035) it would have been obvious to one of the ordinary skill in the art at the time of the was made invention to use SNMP protocol in Yacoub's invention because doing so would enable devices in a network to acquire knowledge of the type of protocol that is being used on the particular Fibre Channel interconnect.

### **Response to Arguments**

4. Applicant's arguments have been fully considered but they are not persuasive. In the remarks applicant argue in substance that Yacoub does not

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disclose or suggest determination of location/distance of printers on a network. In response to that, Yacoub discloses directing of print jobs in a network printing system where user/client requests a print job using a command on a GUI menu. When the request is input, a server is queried to locate the physical locations of each printer on the network using the coordinate (x,y) system. Once the locations of these printers are determined the server determines the most appropriate printer that is closest to the client / user (see paragraph 0027).


**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sargon N Nano whose telephone number is (571) 272-4007. The examiner can normally be reached on 8 hour.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is--assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair.direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sargon Nano  
July 19, 2006

  
ARIO ETIENNE  
SUPERVISORY PATENT EXAMINER  
EBC CENTER 2100